

**Amendments to the Claims under Revised 37 C.F.R. § 1.121**

Claim 1 (currently amended):           An isolated nucleic acid molecule comprising:

- (a)     the nucleotide sequence as set forth in any of SEQ ID NO: 1, SEQ ID NO: 3, or SEQ ID NO: 5;
- (b)     a nucleotide sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6; or
- (c)     a nucleotide sequence that is complementary to the nucleotide sequence of either (a) or (b).

Claim 2 (currently amended):           An isolated nucleic acid molecule comprising:

- (a)     a region of the nucleotide sequence of any of SEQ ID NO: 1, SEQ ID NO: 3, or SEQ ID NO: 5 encoding a polypeptide fragment of at least about 25 amino acid residues, ~~wherein the polypeptide fragment has an activity of a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6, or is antigenic;~~
- (b)     a region of the nucleotide sequence of any of SEQ ID NO: 1, SEQ ID NO: 3, or SEQ ID NO: 5, ~~or the nucleotide sequence of (a);~~ comprising a fragment of at least about 16 nucleotides; or
- (c)     a nucleotide sequence that is complementary to the nucleotide sequence of either (a) or (b).

Claim 3 (currently amended):           An isolated nucleic acid molecule comprising:

- (a)     a nucleotide sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 ~~with~~ having at least one conservative amino acid substitution, wherein the ~~encoded~~ polypeptide ~~has an activity of a~~ having at least one conservative amino acid substitution is at least about 70 percent identical to the polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6;
- ~~(b) — a nucleotide sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 with at least one amino acid insertion, wherein the encoded polypeptide has an activity of a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or~~

SEQ ID NO: 6;

~~(e)~~ a nucleotide sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 with at least one amino acid deletion, wherein the encoded polypeptide has an activity of a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6;

~~(d)~~(b) a nucleotide sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 ~~which has~~having a C- and/or N- terminal truncation, wherein the ~~encoded polypeptide has an activity of a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6~~having a C- and/or N- terminal truncation comprises at least about 25 amino acid residues;

~~(e)~~(c) a nucleotide sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 ~~with~~having at least one modification that is a conservative amino acid substitution, ~~an amino acid insertion, an amino acid deletion, C-terminal truncation, or N-terminal truncation~~, wherein the ~~encoded polypeptide has an activity of a~~having at least one modification is at least about 70 percent identical to the polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 4, or SEQ ID NO: 6 and comprises at least about 25 amino acid residues;

~~(f)~~(d) a nucleotide sequence of any of (a) - ~~(e)~~(c) comprising a fragment of at least about 16 nucleotides; or

~~(g)~~(e) a nucleotide sequence that is complementary to the nucleotide sequence of any of (a) - ~~(f)~~(d).

Claim 4 (previously presented): A vector comprising the nucleic acid molecule of any of Claims 1, 2, or 3.

Claim 5 (original): A host cell comprising the vector of Claim 4.

Claim 6 (original): The host cell of Claim 5 that is a eukaryotic cell.

Claim 7 (original): The host cell of Claim 5 that is a prokaryotic cell.

Claim 8 (currently amended): A process of producing a ~~B7-like~~ polypeptide encoded by the nucleic acid molecule of any of Claims 1, 2, or 3, comprising culturing the host cell of Claim 5 under suitable conditions to express the polypeptide, and optionally isolating the polypeptide from the culture.

Claim 9 (cancelled).

Claim 10 (currently amended): The process of Claim 8, wherein the nucleic acid molecule comprises promoter DNA other than the promoter DNA for the native ~~B7-like polypeptide gene~~ operatively linked to the ~~DNA encoding the B7-like polypeptide~~ nucleic acid molecule.

Claim 11 (currently amended): The isolated nucleic acid molecule according to Claim ~~[[2]]~~3, wherein the percent identity is determined using a computer program that is GAP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, or the Smith-Waterman algorithm.

Claim 12-47 (cancelled).

Claim 48 (previously presented): A viral vector comprising the nucleic acid molecule of any of Claims 1, 2, or 3.

Claim 49-56 (cancelled).

Claim 57 (previously presented): The nucleic acid molecule of any of Claims 1, 2, or 3 attached to a solid support.

Claim 58 (previously presented): An array of nucleic acid molecules comprising at least one nucleic acid molecule of any of Claims 1, 2, or 3.

Claim 59 (currently amended) An isolated nucleic acid molecule comprising:

(a) a nucleotide sequence encoding a polypeptide comprising the amino acid sequence as set forth in SEQ ID NO: 2;[[:]]

~~Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
Xaa Xaa Ile Glu Gly Pro Gln Asn Xaa Xaa Val Leu Lys Xaa Ser Xaa Ala Xaa Phe  
Asn Cys Thr Val Xaa Xaa Gly Trp Lys Leu Xaa Met Trp Xaa Leu Xaa Xaa Met Val  
Val Leu Ser Xaa Xaa Xaa Xaa Xaa Pro Ile Ile Thr Asn Xaa Arg Phe Thr Xaa Xaa  
Xaa Tyr Xaa Xaa Xaa Xaa Xaa Phe Xaa Ser Glu Xaa Ile Ile His Xaa Val Xaa Pro Ser  
Asp Ser Gly Xaa Xaa Xaa Cys Ser Leu Gln Asn Ser Xaa Xaa Xaa Gly Ser Ala Xaa  
Leu Xaa Val Gln Val Met Gly Xaa Leu Xaa Ile Pro Ser Xaa Asn Leu Xaa Val Xaa  
Glu Xaa Glu Pro Cys Xaa Val Thr Cys Xaa Xaa Xaa Xaa Trp Thr Xaa Leu Pro Asp  
Ile Ser Trp Glu Leu Xaa Xaa Xaa Val Ser His Ser Ser Tyr Xaa Xaa Xaa Xaa Glu Pro  
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Xaa Leu Xaa Leu Thr Pro Xaa Xaa Asn Gly Thr  
Leu Thr Cys Val Ala Xaa Xaa Lys Xaa Leu Xaa Ala Xaa Lys Ser Xaa Thr Val Asn  
Leu Thr Val Xaa Xaa Xaa Pro Xaa Asp Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Leu Pro Thr Trp Xaa Xaa Xaa Xaa Leu  
Xaa Xaa Ala Xaa Xaa Xaa Leu Leu Xaa Xaa Xaa Xaa Xaa Leu Xaa Ile Xaa Xaa Cys  
Cys Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa  
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys  
Xaa Xaa Xaa Glu Thr Xaa Xaa Xaa Ser Gly Xaa Glu Asn Xaa Gly Tyr Xaa Ser Asp  
Glu Xaa Lys Xaa Xaa Xaa Thr Ala Ser Leu Pro Pro Lys Ser Xaa Glu Xaa Ser Xaa  
Pro Glu Xaa Arg Xaa Ser Xaa Xaa Xaa Xaa Pro Xaa Gln Xaa Xaa Xaa Xaa Xaa Xaa  
Pro Xaa Pro Ala Xaa His Pro Xaa Xaa Ser Phe Xaa Leu Ala Ser Pro Xaa Lys Val  
Xaa Asn Xaa Thr Xaa Val,~~

wherein the residue at positions 19, 34, 93, and 378 is either glutamic acid or glutamine;  
the residue at positions 20, 100, 131, 181, 214, and 246 is either isoleucine or valine;  
the residue at positions 36, 108, and 360 is either arginine or histidine;  
the residue at positions 42, 116, 220, 253, and 366 is either serine or threonine;  
the residue position 43 is either glutamine or histidine;  
the residue at positions 48 and 374 is either isoleucine or leucine;  
the residue at positions 51, 133, 305, 327, and 328 is either alanine or threonine;

~~the residue at positions 60, 159, 179, 250, and 385 is either valine or leucine;~~  
~~the residue at positions 101, 215, 295, and 369 is either arginine or glutamine;~~  
~~the residue at position 114 is either tyrosine or phenylalanine;~~  
~~the residue at position 135 is either asparagine or glycine;~~  
~~the residue at positions 202, 345, and 359 is either lysine or glutamine;~~  
~~the residue at position 239 is either serine or alanine;~~  
~~the residue at position 254 is either methionine or leucine;~~  
~~the residue at positions 280 and 338 is either cysteine or alanine;~~  
~~the residue at positions 5 18, 27, 28, 32, 53, 54, 61 64, 70, 74 76, 78 82, 84, 87, 91, 99, 109,~~  
~~110, 122, 124, 127, 139, 143 146, 149, 158, 160, 167 170, 173 178, 183, 187, 188, 197, 198, 200,~~  
~~204, 207, 216, 218, 221, 235, 236, 238, 244, 245, 247, 249, 252, 257 261, 263, 265, 266, 281 293,~~  
~~296 303, 306, 307, 310 312, 315, 318, 321, 325, 329, 340, 342, 347, 351, 352, 354, 356 358, 361,~~  
~~363, 370, 373, 381, and 383 may be is any naturally occurring amino acid; and~~  
~~the residue positions 1 4, 223 234, 270 278, 349, and 350 may be any naturally occurring~~  
~~amino acid or may be absent; or~~  
wherein the glutamic acid residue at any of positions 15, 89, or 374 may be substituted  
with a glutamine residue;  
the valine residue at any of positions 16, 127, or 242 may be substituted with an  
isoleucine residue;  
the glutamine residue at position 30 may be substituted with a glutamic acid residue;  
the arginine residue at any of positions 32, 104, or 356 may be substituted with a  
histidine residue;  
the serine residue at either position 38 or 362 may be substituted with a threonine  
residue;  
the glutamine residue at position 39 may be substituted with a histidine residue;  
the isoleucine residue at position 44 may be substituted with a leucine residue;  
the alanine residue at either position 47 or 129 may be substituted with a threonine  
residue;  
the valine residue at any of positions 56, 175, or 381 may be substituted with a leucine  
residue;

the methionine residue at either position 83 or 250 may be substituted with a leucine residue;

the isoleucine residue at any of positions 96, 177, or 210 may be substituted with a valine residue;

the arginine residue at either position 97 or 211 may be substituted with a glutamine residue;

the tyrosine residue at position 110 may be substituted with a phenylalanine residue;

the threonine residue at any of positions 112, 216, or 249 may be substituted with a serine residue;

the asparagine residue at position 131 may be substituted with a glycine residue;

the leucine residue at either position 155 or 246 may be substituted with a valine residue;

the lysine residue at position 198 may be substituted with a glutamine residue;

the serine residue at position 235 may be substituted with an alanine residue;

the cysteine residue at either position 276 or 340 may be substituted with an alanine residue;

the glutamine residue at either position 291 or 365 may be substituted with an arginine residue;

the threonine residue at any of positions 301, 323, or 324 may be substituted with an alanine residue;

the aspartic acid residue at position 325 may be substituted with a glutamic acid residue;

the glutamine residue at either position 341 or 355 may be substituted with a lysine residue; or

the leucine residue at position 370 may be substituted with an isoleucine residue; or

(b) a nucleotide sequence that is complementary to the nucleotide sequence of (a).